1: Jochelson E-5 (1900-01) 1908 R94 Koryak R94

mouth of Gishiga River; and only at high tide are the steamer-tugs able to enter the mouth of the river.

When a strong wind is blowing, steamers cannot lie at anchor, and, since storms are of frequent occurrence in the Okhotsk Sea, it often happens that steamers are compelled to stand off for a week, without being able to cast anchor. Once for two weeks a government steamer (until 1900, only once a year did a government steamer call at Gishiga) was unable to approach the mouth of the Gishiga; and, to avoid greater loss of time, she steamed farther north, to the Anadyr, without having discharged her cargo in Gishiga, and thus the inhabitants of Gishiga were left without provisions for the winter.

In former times, Penshina Bay, when its waters still swarmed with whales, was frequented by American whaling-schooners, which anchored near the Koryak villages. Even now American whaling-schooners enter Penshina Bay from time to time; but steamers have not yet visited it. So far its depth has been little sounded. In 1897 the steamer "Kotik," belonging to the Kotik Company,[1] made an attempt to cast anchor near the Kamenskoye settlement; but, the mouth of the river proving to be full of rocks, the attempt had to be given up. However, in 1895–96 the Russian schooner "Siberia" succeeded in coming close to the village and unloading its cargo.[2]

I arrived in Gishiga at the end of August, 1900, on the steamer "Khabarovsk" of the Russian Volunteer Fleet. In order to avoid loss of time, I wished to get to the Maritime Koryak of Penshina Bay before the opening of winter travel. In the summer, communication with the Koryak villages is interrupted. I wanted to avail myself of the steamer "Progress" of the Russian-American Gold-Mining Company, which was then about to leave Gishiga for Vladivostok. I applied to Mr. Shockley, the American engineer in charge of that expedition, for passage with them, for myself and my companions, over to the Itkana Koryak in Penshina Bay, on their way to Vladivostok. Unfortunately he did not grant my request, for the captain of the steamer thought it too risky to venture into a bay which had not been surveyed.

Baron Korff's Bay, in Bering Sea, is about thirty-five miles long. It is deep, and has several harbors suitable for steamers. There are a few other accessible bays in Bering Sea, such as the one at the mouth of Karagha River, sixteen miles long, and another one, called False Bay, on the western shore of Karagha Island, which is often visited by American schooners for walrus-hunting.[3]

RIVERS AND LAKES. — All those rivers of the Koryak territory which flow from the Stanovoi Ridge, its spurs, or the Kamchatka Ridge, are short

[1] The Russian word *kotik* (КОТИКЪ) means "sea-bear" (*Otaria ursina* L.). [2] See Slunin, I, p. 155.

[3] In August, 1897, Karagha Harbor and False Bay were visited by the British man-of-war H. M. S. "Linnet" see G. E. H. Barrett-Hamilton and H. O. Jones, A Visit to Karaginski Island, Kamchatka, in The Geographical Journal of the Royal Geographical Society, London, September, 1898, pp. 280–299.

1: Jochelson E-5 (1900-01) 1908 R14 Koryak RY4

cossack. On mornings after a strong wind had been blowing at night, the hut would be found covered up to the roof with snow, so that we were unable to get out, and the Koryak would come to shovel off the snow and dig us out. 132

The bays of Okhotsk Sea, as well as those of Bering Sea near the Koryak shores, remain open in winter. Only the northern part of Gishiga Bay freezes up for a distance of from ten to fifteen miles from the shore. As late as May 10, 1901, I succeeded in driving on dog-sledges across the sea-ice from the mouth of the Chaibuga River to the small Russian settlement Kushka, at the mouth of the Gishiga, since, owing to the rising of the mountain-streams and the melting of the snow, it was impossible to go to that place direct by land. However, in Penshina Bay and on Bering Sea, only small narrow bays and a narrow strip along the shore freeze up; and in the course of the winter, even this strip of ice often gives way to the attacks of stormy tides and violent winds, and the ice is carried off into the open sea.

The mouth of the Penshina remained clear during my entire stay at Kamenskoye. Each incoming tide brought in the ice-floes, which, breaking against the rocky shore, were turned into a mass of ice, or left upon the rocks. All these circumstances — the open sea, the instability of the ice along the coast, and the floating ice in the open — affect unfavorably the sea-hunting of the Koryak. During the winter, when the Chukchee and Eskimo hunt seals under the ice, the Maritime Koryak cannot have fresh provisions from the sea, but are dependent upon their summer and fall supplies. 132 225

On the other hand, since the sea is not ice-bound, navigation in the Okhotsk Sea begins early in spring. According to Slunin,[1] American whaling-schooners appear in Penshina Bay as early as April, casting anchor near the Itkana settlement on the Taigonos Peninsula and in Ma'meč Bay in Kamchatka, where they find shelter from the strong winds. The first Russian steamers, however, do not sail from Vladivostok for the ports of the far north before the end of May, since, even as late as June, drifting ice is to be found in Baron Korff's Bay, near Okhotsk, and even near the Shantar Islands, situated to the north of the mouth of the Amur River, whither they are carried by the cold currents. The cold current from Bering Sea hugs the eastern shores of Kamchatka, while two cold currents are observed in Okhotsk Sea, — one, from Gishiga Bay toward the southeastern shores of Okhotsk Sea; another, in the northern part of Penshina Bay, passing along the western shore of Kamchatka toward the Kurile Islands. 505 132

The presence of ice far into summer, which absorbs most of the heat of the long summer days prevailing in that latitude, does not give the sea-water a chance to get warm, and to moderate the night temperature of the 132

[1] Slunin, I, p. 259.

1: Jochelson E-5 (1900-01) 1908 RY4 Koryak RY4

501 The Koryak have a rectangular sail made of dressed reindeer-skins sewed
281 together. Instead of a mast, they employ a more primitive contrivance. Three long poles are tied together at one end with a thong which passes through drill-holes, and are set up in the manner of a tripod. On one side the whole length of the sail is sewed to a yard the middle of which is slung from the top of the tripod by means of a stout thong. The tripod is set up in the middle of the boat by tying both ends of two of the poles to the ribs on one side of the boat, while the third pole is fastened on the other side of the boat. The sail can revolve around the top of the tripod, and is set in the direction required by the wind by means of braces and sheets made of thong, which are fastened to the rails (Fig. 80, *f*).

The care of the skin boats is the same everywhere. On returning to shore from a trip, the boat is pulled ashore and turned bottom up to let the skin dry. After a few days, when it is dry, it is oiled anew. About the middle of October, when the hunting-season is over, the boat is taken out of the water, the skin cover is taken off, and, when completely dry, is put away for the winter in a storehouse,[1] that the dogs may not get access to it. I have been told that the people of Karaga and Kičhin, on Bering Sea, do not remove the walrus-skin cover from the frame for the winter, but turn the boat keel upwards and hang it on posts, that the dogs may not get at it.

501 The Koryak skin boat can carry fairly heavy loads. In the autumn of
● 505 1900 we crossed in two boats from the settlement of Paren to Kuel. As the former place is about seven miles from the mouth of the Paren River, the boats entered the river at high tide, and with the ebb-tide we sailed out into the open sea. We carried about two thousand pounds of cargo, and our party consisted of twenty-five members, — myself with four companions, and ten Koryak to each boat. In each boat there were eight oarsmen, among whom were women and lads. In addition, each boat carried eight dogs in harness, which lay in the stern. Notwithstanding this heavy load, the boats were not more than half in the water. We went on fairly fast, and covered a distance of twenty miles in three hours and a half. When we had turned the islets and the rocky shore at the mouth of the river, and had reached a low strip of coast covered with sticky clay, which had run dry with the receding tide, the skin boats approached the shore. The dogs were taken ashore and harnessed to the sides of the boats. They were driven by two lads, who ran behind them on shore. The oars were laid along the sides of the boat inside. The steersmen alone directed the boats so as to keep them within from six to nine metres from shore. Whenever a stone or a drift-log
501 would catch the traces, the drivers would clear them.
511 Not all families possess boats, as this involves a great outlay of seal-skins,
422 which are needed for clothing, barter, sale, and fur-tribute (yasa'k). Only

[1] See Plate XXI, Fig. 1. The skin cover is hung up near the storehouse, to be put away when dry.

1: Jochelson E-5 (1900-01) 1908 RY1 Koryak RY4

Talovka one route leads by way of Rekmnok to Kamchatka, another by way of Vetvey to Qayilin. From Qayilin one route leads to the Opuka River, and another by way of Vivnik to Kamchatka. Along the most of these courses lies the official route over which the mail is transported. From Gishiga the mails are sent to three places and back again, — to Yakutsk by way of Okhotsk, to Petropavlovsk by way of Kamenskoye, and to Markova on the Anadyr by way of Shestakovo and the Russian settlement Penshinsk. Three mails are sent during the year from Gishiginsk to each of these three points, and as many return mails are received in Gishiginsk. The mails are sent in November, January, and April respectively. They are despatched on two or three sledges, one of which is occupied by the Cossack letter-carrier. As a rule, the mail is carried by dog-sledge; but over the Parapol Dol to North Kamchatka it is often carried by the reindeer of the local Koryak. In each settlement, Russian or Koryak, lying on the route, the dog-teams are changed. Some time ago the inhabitants of villages had to transport the mails free of charge; but of late the Government has fixed a fee of three kopeks per verst[1] for each sledge. The elder of each village gathers the dogs contributed by the villagers, receives the official fees and distributes them among the inhabitants. The elders come for their pay to Gishiginsk, or receive it from the district chief or his assistant when one of them makes the round of the district. The distance from Gishiginsk to Yakutsk is equal to 2975 versts; from Gishiginsk to Petropavlovsk, 2061 versts; and from Gishiginsk to Markova on the Anadyr, 700 versts.

In summer, communication between Gishiginsk and the interior ceases almost completely. Neighboring settlements or camps are reached by walking. The Maritime Koryak use skin boats, in addition. Until the year 1900, there arrived at the mouth of the Gishiga River during the summer one Government steamer from Vladivostok, not counting two trading-steamers. The Government hired a steamer of the voluntary fleet. In 1900 the Government entered into an agreement with the steamship company of the East Chinese Railway, calling for four cruisers to northern waters up to the mouth of the Anadyr. All the steamers had to stop at the mouth of the Gishiga River; and the steamer of the second cruise, at Baron Korff's Bay in addition. During the period 1900–02 these cruises were made regularly; but with the opening of the Japanese war, they were stopped entirely, and I do not know in what form they were renewed after the conclusion of peace.

There is no direct winter route from Okhotsk south to the Amur River and to Vladivostok. This almost precludes all winter communication between Gishiginsk, Markova, and Petropavlovsk, with Vladivostok, the last-named place being the seat of the Governor, to whom the Gishiga, Anadyr, and Kamchatka districts are subject. The only practical winter route between these places

[1] A verst is equivalent to 0.663 of an English mile.